

REMARKS/ARGUMENTS

Claims 1-3 and 5-20 are active in this case. Support for the amendment to Claim 1 is found in Claim 4. The specification is amended to provide a reference to the earlier filed 371 application.

No new matter is added.

The rejection of Claims 1, 2, 4, 5, 12, 14, and 15 under 35 USC 102(b) in view of Bost is respectfully traversed.

As noted by the Office, Bost describes a cyclization reaction of dimethyl octanedioate to cycloheptadecanone in the presence of a thorium oxide catalyst. However, thorium oxide is highly toxic and radioactive actinoid compound but is not an oxide of subgroup I to VII or of a main group II, III or IV as set forth in amended Claim 1. Accordingly, the claims cannot be anticipated by Bost and withdrawal of this rejection is requested.

Moreover, the claims would not have been obvious in view of Bost, as there is nothing in Bost which would suggest to one to replace the thorium oxide catalyst with a heterogeneous catalyst as defined in the claims. AAs discussed on page 1, lines 23-26 of the present specification, the Bost reaction leads to a 14% yield in cyclic ketone. In contrast, the claimed method generates cyclized products at high yields, noting Examples 1 and 2 in the specification which demonstrate 78 and 45% yields, respectively.

The rejection of Claims 1, 2, 4-6, 8, 12, 14-16 and 18 under 35 USC 102(b) in view of Ruzicka is respectfully traversed.

The process described in Ruzicka is to the making macrocyclic ketones by cyclization of dicarboxylic acid at a temperature of 300 to 500 C using titanium hydroxide or titanium oxide. (see Example 1, col. 2). Also described by Ruzicka is the use of titanium salts of the

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starting materials or mixtures of 1,4 dicarboxylic acid with titanium dioxide or titanium hydroxide (see all of the Examples of Ruzicka). At the temperatures used in Ruzicka, e.g., 300 to 550 C, these mixtures will also form corresponding titanium salts of the starting materials. Such salts are not volatile at the temperature in which the reaction is conducted and therefore, the cyclization in Ruzicka must take place in a condensed phase—the only reaction component that is evaporated is the final cyclized product. In contrast, in the claimed process cyclization takes place in the gas phase.

As the claimed process is therefore clearly different from the processes described by Ruzicka, Applicants request withdrawal of this ground of rejection.

Moreover, Applicants also request withdrawal of the rejection of Claims 3, 7, 9-11, 13, 17, 19 and 20 under 35 USC 103(a) in view of Ruzicka. As noted immediately above, Ruzicka's process is carried out in a condensed phase but not a gas phase as claimed. There is nothing in Ruzicka which would lead one to carry out the cyclization reaction in the gas phase and as such the claimed invention could not have been obvious based on Ruzicka. Withdrawal of this rejection is requested.

A Notice of Allowance is also requested.

Respectfully submitted,

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